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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/706,352  
Filing Date: November 12, 2003  
Appellant(s): JONES ET AL.

**MAILED**

**JAN 23 2008**

**Technology Center 2100**

Gerald L. Smith, Reg. # 22,009  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 4 October 2007 appealing from the Office action mailed 17 May 2007.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after non-final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal:

2004/0078366	CROOKs et al.	04-2004
6,778,995	GALLIVAN	08-2004
2005/0086238	NEVIN, III	04-2005
7,085,755	BLUHM et al.	08-2006

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,778,995 to Gallivan (hereafter Gallivan) in view of US Patent No 7,085,755 to Bluhm et al (hereafter Bluhm) in view of US PGPub 2005/0086238 to Nevin, III (hereafter Nevin).**

**Referring to claim 1**, Gallivan discloses a method for evaluating the text content of a document database with respect to a document population (see abstract), comprising the steps of:

(a) providing a computer system [individual computer systems] having a user interface with a display (see column 5, lines 10-17);

(b) gathering documents from said database into said system (see column 4, lines 47-60);

(c) normalizing said gathered documents (see column 6, lines 48-53);

(e) determining [generating] a text criteria [themes or concepts] with respect to said document population (see column 7, lines 5-14); and

(f) forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction (see Fig 14; column 9, line 53 – column 10, line 18).

However, while Gallivan discloses the method including the limitations of (a) providing a computer system having a user interface with a display; (b) gathering documents from said database into said system; (c) normalizing said gathered documents; (e) determining a text criteria with respect to said document population; and (f) forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction;, Gallivan fails to explicitly teach the further limitations of (d) fingerprinting said gathered documents; (g) loading said text criteria into at least one of said nodes; (h) for each document of said database, calculating its geometric relative distance from

a said node to derive one or more node attractors; (i) displaying said net at said display in combination with one or more document symbols each representing a said document located in correspondence with said calculated relative distance; (j) visually examining the display of said net and document symbols; and (k) determining from said document symbol locations at said display those documents, if any, which are more likely to correspond with said text criteria. Bluhm discloses managing a large corpus of documents (see abstract), including the further limitation of (d) fingerprinting said gathered documents (see column 26, line 8 – column 27, line 14).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the step of fingerprinting the documents as disclosed by Bluhm with the steps disclosed by Gallivan for pre-processing the documents. One would have been motivated to do so in order to improve the accuracy of determining the interaction of concepts.

However, while the combination of Gallivan and Bluhm (hereafter Gallivan/Bluhm) discloses the method including the limitations of (a) providing a computer system having a user interface with a display; (b) gathering documents from said database into said system; (c) normalizing said gathered documents; (d) fingerprinting said gathered documents; (e) determining a text criteria with respect to said document population; and (f) forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction;, Gallivan fails to explicitly teach the further limitations of (g) loading said text criteria into at least one of said nodes; (h) for

each document of said database, calculating its geometric relative distance from a said node to derive one or more node attractors; (i) displaying said net at said display in combination with one or more document symbols each representing a said document located in correspondence with said calculated relative distance; (j) visually examining the display of said net and document symbols; and (k) determining from said document symbol locations at said display those documents, if any, which are more likely to correspond with said text criteria.. Nevin discloses forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction (see Fig 1), including the further limitations of:

(g) loading said text criteria into at least one of said nodes (see [0018] – data is stored in the nodes);

(h) for each document of said database, calculating its geometric relative distance from a said node to derive one or more node attractors (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(i) displaying said net at said display in combination with one or more document symbols each representing a said document located in correspondence with said calculated relative distance (see [0033]; [0084]; and Fig 2);

(j) visually examining the display of said net and document symbols (see [0084], lines 14-17); and

(k) determining from said document symbol locations at said display those documents, if any, which are more likely to correspond with said text criteria (see [0313] and [0315] – the user determines which categories are considered to be good or bad).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the documents of Gallivan/Bluhm, which have been gathered, normalized, fingerprinted and categorized. One would have been motivated to do so to provide a more accurate method displaying search results.

**Referring to claim 2**, the combination of Gallivan/Bluhm and Nevin (hereafter Gallivan/Bluhm/Nevin) discloses the method of claim 1 in which:

said step (f) forming a net provides for the display of said net as having said nodes defined as circles and said interaction defined as a line extending between said circles [each cluster has a center  $c$  and a radius  $r$ ; each radius extends to the common origin; two clusters are connected by their radius and the common origin] (Gallivan: see Fig 14 and column 9, lines 53-60).

**Referring to claim 3**, Gallivan/Bluhm/Nevin discloses the method of claim 1 in which:

said step (g) loads said text criteria into a positive designated one of said nodes (Nevin: see [0031] and [0084], lines 4-14 – data is stored in the nodes; a node can have a positive position).

**Referring to claim 4**, Gallivan/Bluhm/Nevin discloses the method of claim 1 in which:



said step (f) forms said net as comprising a said positive designated node and a null designated node connected by a said interaction (Nevin: see [0083]; [0084], lines 4-14; [0123] – the last node is used as the null node; the nodes are connected by lines to demonstrate an interaction).

**Referring to claim 5**, Gallivan/Bluhm/Nevin discloses the method of claim 1 in which:

said step (e) determines said text criteria as criteria document textual material (Gallivan: see column 6, lines 33-47; Bluhm: see column 6, lines 33-47); and

said step (g) comprises the steps:

(g1) normalizing said criteria document textual material (Gallivan: see column 6, lines 5-7; Bluhm: see column 22, lines 40-44); and

(g2) fingerprinting the normalized criteria document textual material (Bluhm: see column 26, line 8 – column 27, line 14).

**Referring to claim 7**, Gallivan/Bluhm/Nevin discloses the method of claim 1 in which:

said step (i) displays said one or more document symbols as squares (Nevin: see Fig 8 – examples of the documents include Glazing\_Techniques, Acrylics, Frescoes, Secular\_Images, Food and Oils).

**Referring to claim 8**, Gallivan/Bluhm/Nevin discloses the method of claim 1 including the steps:

(l) retrieving the identification of those documents resulting from the determination of step (k) (Nevin: see [0313] and [0315]);

(m) viewing one or more of the documents identified in step (l) and determining the quality of the match thereof with said step (e) text criteria (Nevin: see [0313] and [0315]).

**Referring to claim 9**, Gallivan/Bluhm/Nevin discloses the method of claim 8 further comprising the steps:

(n) identifying a new text criteria as a result of a said step (m) determination of an insufficient said quality of said match (Nevin: see [0313] and [0315]);

(o) adding the identified new text criteria to the step (g) text criteria loaded into said positive designated one of said nodes (Nevin: see [0313] and [0315]); and

(p) reiterating said steps (h) through (m) (Nevin: see [0313] and [0315]).

**Referring to claim 10**, Gallivan/Bluhm/Nevin discloses the method of claim 8 further comprising the steps:

(q) subsequent to said step (m), identifying and viewing at said display a list of features common to those documents the identification of which was retrieved in step (l) (Nevin: see [0313]-[0316]);

(r) identifying a new text criteria in correspondence with said step (q) identification and viewing at said display of said features common to those documents the identification of which was retrieved in step (l) (Nevin: see [0313]-[0316]);

(s) adding the identified new text criteria to the step (q) text criteria loaded into said positive designated one of said nodes (Nevin: see [0313]-[0316]); and

(t) reiterating said steps (h) through step (m) (Nevin: see [0313]-[0316]).

**Referring to claim 11**, Gallivan/Bluhm/Nevin discloses the method of claim 1 in which:

said step (k) further comprises the steps:

(k1) determining additional text criteria where said document symbol locations are not likely to correspond with said text criteria determined at step (e) (Nevin: see [0313]-[0316]); and

(k2) adding said additional text criteria to said text criteria determined at said step (e) (Nevin: see [0313]-[0316]).

**Referring to claim 12**, Gallivan/Bluhm/Nevin discloses the method of claim 8 in which:

said step (l) is carried out by drawing at said display of said net a boundary defining a region of said symbols (Nevin: see [0320] – the boundary region is determined by the available screen space).

**Claims 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 7,085,755 to Bluhm et al (hereafter Bluhm) in view of US PGPub 2005/0086238 to Nevin, III (hereafter Nevin).**

**Referring to claim 13**, Bluhm discloses a method for evaluating the text content of a document database with respect to a population of documents (see abstract) comprising the steps of:

(a) providing a computer system having a user interface with a display (see column 29, lines 25-36);

(f) selecting a said document attribute to be correlated and the criteria for establishing an attribute value match (see column 6, lines 33-47);

(g) determining the presence of one or more document attribute value match pairs as correlations between said first and second regions (see column 6, lines 33-47).

However, while Bluhm discloses the method including the limitations (a) providing a computer system having a user interface with a display; (f) selecting a said document attribute to be correlated and the criteria for establishing an attribute value match; and (g) determining the presence of one or more document attribute value match pairs as correlations between said first and second regions, Bluhm fails to explicitly teach the further limitations of (b) forming one or more nets each comprising at least two nodes associated by at least one interaction (see Fig 1), one or more said nodes representing an evaluation criteria (see [0081] – the data is stored in the nodes), said one or more nets being viewable at said display (see Fig 1);

(c) treating said documents to have an attribute value and calculating for each document a geometric relative distance with respect to a said node criteria and displaying corresponding document symbols at said display; (d) delimiting at said display a first region of said document symbols; (e) delimiting at said display a second region of said document symbols; and (h) displaying said correlations at said display. Nevin discloses a method of displaying and storing data in linked nodes (see abstract), including the further limitations of:

(b) forming one or more nets each comprising at least two nodes associated by at least one interaction (see Fig 1), one or more said nodes representing an evaluation

criteria (see [0018] – the data is stored in the nodes), said one or more nets being viewable at said display (see Fig 1);

(c) treating said documents to have an attribute value and calculating for each document a geometric relative distance with respect to a said node criteria and displaying corresponding document symbols at said display (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(d) delimiting at said display a first region of said document symbols (see [0031] and Fig 1 – linking the nodes together is considered to represent *delimiting*; the connection of Node 1 to Node 2 is considered to represent a first region);

(e) delimiting at said display a second region of said document symbols (see [0031] and Fig 1 – linking the nodes together is considered to represent *delimiting*; the connection of Node 2 to Node 3 is considered to represent a second region); and

(h) displaying said correlations at said display (see [0033] – the display of nodes based on a location calculated from force parameters is considered to represent *displaying correlations*).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the gathered documents of Bluhm. One would have been motivated to do so to provide a more accurate method displaying search results.

**Referring to claim 14**, Bluhm/Nevin discloses the method of claim 13 in which:

said step (d) provides a said first region extending over more than one said net (Nevin: see [0031] and Fig 1); and

includes the step:

(d1) mapping said first region to a first document set by selecting the union or intersection of documents on different nets (Nevin: see [0031] and Fig 1).

**Referring to claim 15**, Bluhm/Nevin discloses the method of claim 13 in which: said step (e) provides a said second region extending over more than one said net (Nevin: see [0031] and Fig 1); and

including the step:

(e1) mapping said second region to a second document set by selecting the union or intersection of documents on different nets (Nevin: see [0031] and Fig 1).

**Referring to claim 16**, Bluhm/Nevin discloses the method of claim 13 in which: said step (f) selects said criteria for establishing an attribute value match by defining an attribute value tolerance (Bluhm: see column 6, lines 33-47).

**Referring to claim 17**, Bluhm/Nevin discloses the method of claim 16 in which: said step (g) determines the presence of a document attribute match pair by determining whether the attribute value of a document in said first region is equal to the attribute value of a document in said second region within said attribute value tolerance (Bluhm: see column 6, lines 33-47).

**Referring to claim 18**, Bluhm/Nevin discloses the method of claim 13 in which:

said step (d) is carried out by providing a computer generated line or lines visible at said display (Nevin: see [0083]).

**Referring to claim 19**, Bluhm/Nevin discloses the method of claim 13 in which:

said step (e) is carried out by providing a computer generated line or lines visible at said display (Nevin: see [0083]).

**Referring to claim 20**, Bluhm/Nevin discloses the method of claim 13 in which:

said step (h) is carried out by providing visible line at said display connecting two said symbols and representing said correlation (Nevin: see [0083]).

**Referring to claim 21**, Bluhm/Nevin discloses the method of claim 13 in which:

said step (f) selects said document attribute or document identification see (Nevin: [0093], lines 4-7); and

said step (g) identifies the same document in each said first and second region as a said correlation (Nevin: see [0094]).

**Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2004/0078366 to Crooks et al (hereafter Crooks et al) in view of US PGPub 2005/0086238 to Nevin, III (hereafter Nevin).**

**Referring to claim 22**, Crooks et al discloses

(a) providing a computer system having a user interface with a display (see [0020]);

(b) identifying the population of documents to be searched (see [0022] – searching the database);

(c) normalizing the documents of the identified population (see [0023], lines 7-9 – normalizing the documents located in the database) with the steps comprising;

(c1) selecting character sequences that will separate words (see [0024], lines 65-70),

(c2) determining to either retain or eliminate punctuation characters (see [0024], lines 28-67),

(c3) setting regular expressions that will characterize numbers (see [0024], lines 1-28),

(c4) setting case behavior (see [0023], lines 2-10),

(c5) setting an offset and factor for numeric class (see [0024], lines 1-28),

(c6) converting a document of said identified population to a character (see [0023], lines 17-18) sequence,

(c7) accessing the words, or punctuation characters, W of said character sequences (see [0024], lines 1-28),

(c8) for each accessed W which is a number, converting such number into a sequence of word numbers, WN, and normalizing said word numbers for fingerprinting (see [0024], lines 1-28),

(c9) marking the position and length of each W or normalized word number WN (see [0026], lines 31 seq.),

(c10) for each W or normalized WN, completing said normalization by reiterating steps (c8) and (c9) (see [0026], lines 10-12 – refining is considered to represent repeating);



(d) fingerprinting said normalized documents (see [0024]-[0026]).

However, while Crooks et al disclose the method including limitations (a)-(d), Crooks et al fail to explicitly teach the further limitations of (e) forming one or more nets, each comprising at least two nodes, one or more said nodes representing an evaluation criteria, said one or more nets exhibiting two or more spaced apart nodes connected by one or more interactions; (f) for each normalized document, calculating its geometric relative distance from a said node; (g) displaying said one or more nets at said display in combination with one or more document symbols representing a said document located in correspondence with said calculated relative distance; and determining from said document symbol locations at said display, if any, those documents which are more likely to correspond with said evaluation criteria.

Nevin discloses a method of displaying and storing data linked by nodes (see abstract), including the further limitations of:

(e) forming one or more nets, each comprising at least two nodes, one or more said nodes representing an evaluation criteria, said one or more nets exhibiting two or more spaced apart nodes connected by one or more interactions (see Fig 1);

(f) for each normalized document, calculating its geometric relative distance from a said node (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(g) displaying said one or more nets at said display in combination with one or more document symbols representing a said document located in correspondence with said calculated relative distance (see [0033]; [0084]; and Fig 2); and

determining from said document symbol locations at said display, if any, those documents which are more likely to correspond with said evaluation criteria (see [0313] and [0315] – the user determines which categories are considered to be bad or good).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the normalized documents of Crooks et al. One would have been motivated to do so to provide a better method for interfacing with in a manner that is user friendly for a physician (Crooks et al: see [0005]).

## **(10) Response to Argument**

This Examiner's Answer will address the Appellants' arguments in the order in which they appear in the appeal brief.

- **Argument I: Claims 1-12 are not patentable nor obvious over Gallivan in view of Bluhm in view of Nevin.**

- **Claim 1**

**Appellants' Argument:** Step c) calls for normalizing, however, the Gallivan normalization process is not for the purpose of searching but to grouping documents based on certain terms or phrases such that documents under a common theme or concept will be clustered together, Gallivan is simply an approach to displaying documents with a common theme (Appeal Brief: page 16).

**Examiner's Response:** The claim limitation states "normalizing said gathered documents." The cited portion of Gallivan states "Preliminarily, each document in the documents set 44 is preprocessed (block 81) to remove stop words. These include commonly occurring words, such as indefinite articles ("a" and "an"), definite articles ("the"), pronouns ("I," "he" and "she"), connectors ("and" and "or"), and similar non-substantive words (Gallivan: column 6, lines 48-53). The Examiner interprets preprocessing to be a form of normalization. According to the Seventh Edition of The Authoritative Dictionary of IEEE Standards Terms, the term "normalize" is defined as to

alter or position data into a standard format, as in justification of text (page 744, normalize (1)(B)(data management)). Removing stop words is considered to meet this definition since the removal of stop words, which are non-substantive words, from documents alters the data into a standard format.

It is noted that Appellant states that "Gallivan's normalization process is not for the purpose of searching." Therefore, Appellant is admitting that Gallivan includes a normalization process. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., normalization **for the purpose of searching**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**Appellants' Argument:** The examiner then turns to step e) of claim 1 determining a text criteria with respect to said document population. Gallivan pre-establishes a theme or a concept with which to gather similar documents having the same theme within a cluster. By contrast, the nodes of the present invention may perform with documents of a variety of multiple concepts, thus normalization must be quite different. Following the precepts of Gallivan, the present method would be unworkable. The term "text" is defined at page 7 of the application and it is the criteria represented by that text that is loaded into a node to carry out iterative searching wherein a searching rule ultimately may be developed (Appeal Brief: page 16).

**Examiner's Response:** The cited portion of Gallivan states "The selected set of terms and phrases falling within the thresholds are used to generate themes (and concepts) (block 85) based on correlations between normalized terms and phrases in documents set. In the described embodiment, themes are primarily used, rather than individual concepts, as a single co-occurrence of terms or phrases carries less semantic meaning than multiple co-occurrences. As used herein, any reference to a "theme" or "concept" will be understood to include the other term, except as specifically indicated otherwise (Gallivan: see column 7, lines 5-14)." In the rejection, the "themes and concepts" of Gallivan are equated to the "text criteria" of the present application. The terms are equated to one another since the "themes and concepts" of Gallivan meet the definition of "text and text content" [(1) conventional text] defined on page 7 of Appellant's Specification. Concepts and themes are also considered to represent the

documents as a whole in order (column 8, lines 43-64). Furthermore, it is noted that the Appellant's specification fails to explicitly define the term "text criteria."

The Appellant argues "By contrast, the nodes of the present invention may perform with documents of a variety of multiple concepts, thus normalization must be quite different." In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the nodes of the present invention may perform with documents of a variety of multiple concepts) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Also, it is noted that the claim language fails to link the process of normalizing to the process of determining a text criteria in a manner that limits the type of normalization performed.

The Appellant states "The term 'text' is defined at page 7 of the application and it is the criteria represented by that text that is loaded into a node to carry out iterative searching wherein a searching rule ultimately may be developed." The Examiner fails to find this definition for the term "text" on page 7 of the Specification. The Specification states the following:

"The terms "text or text content" as used herein are intended to mean:

(1) conventional text (data interpretable as a sequence of human-readable symbols including numbers).

(2) data convertible to such a sequence, (e.g. binary data rendered in hexadecimal format).

(3) text as defined in (1-2) decorated with external attributes, each of which contain named numeric data and/or one or more named sequences (1-2)" (Appellant's Specification: column 7, lines 13-20).

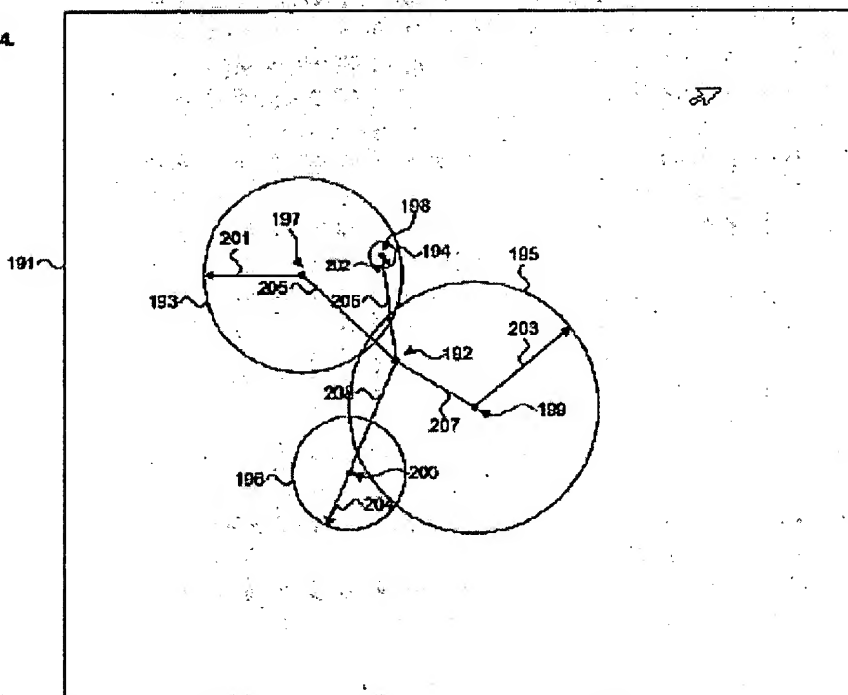
**Appellants' Argument:** Next, the Examiner cites Gallivan with respect to step (f) forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction. Gallivan is displaying clusters, not nodes as taught by the present invention and is not concerned with achieving an indication as how to improve a search based upon an initial answer which may be gotten. Where its no interaction in Gallivan, the lines drawn between clusters are merely to guide the eye (Appeal Brief: page 16).

**Examiner's Response:** The cited portion of Gallivan states "Fig 14 is a data representation diagram 14 showing, by way of example, a view 171 of overlapping clusters 173-176 generated by the system of Fig 1. Each cluster 173-176 has a center  $c$  137-180 and radius  $r$  181-184, respectively, and is oriented around a common origin 172. The center  $c$  of each cluster 173-176 is located at a fixed distance  $d$  185-188 from the common origin 172. Cluster 174 overlays cluster 173 and clusters 173, 175 and 176 overlap ... Those clusters 173-177 located along the same vector are similar in theme as those clusters located on vectors having a small cosine rotation from each other. Thus, the angle  $\theta$  relative to a common axis' distance from a common origin 172 is an independent variable within a correlation between the distance  $d$  and angle  $\theta$  relative similarity of theme" (column 9, line 53 – column 10, line 18).

Figure 14

Figure 14.

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In regards to the Appellant's argument that "Gallivan is displaying clusters not nodes," the examiner disagrees. According to page 366 of the Fifth Edition of the *Microsoft Computer Dictionary*, the term "node" is defined as a junction of some type. Therefore, points 199, 192, 200, 205 and etc are considered to represent nodes since they are connected to one another by links.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., achieving an indication as to how to improve a search based upon an initial answer which may be gotten) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The lines in Fig 14 connecting the nodes are considered to represent the interaction. Page 6, line 26 of Appellant's Specification states "interaction defined as lines." Therefore, the lines of Gallivan are considered to meet this definition. Also, the lines of Gallivan are considered to represent the interactions of the present application since the lines of Gallivan relate to vectors that relate to correlation.

**Appellants' Argument:** Bluhm is cited with respect to step (d). Bluhm describes a document management system providing for the storing and organization of documents. This management includes duplicate detection and an organization of documents based upon a fingerprint geared towards recognizing if two documents are likely to be identical and if they are similar within minor editorial changes that might

move word positions. By contrast, the claims and specification of the present application describe a method for evaluating the text content of a document database wherein nets and document symbols are utilized initially to develop search questions or rules. That is the key to carrying out a good search and that's an important aspect of the subject matter of the claims at hand. The Examiner has applied Bluhm at column 26, line 8 through column 27, line 14 with respect to step (d) of claim 1 for fingerprinting. The fingerprinting described at the pertinent columns of Bluhm sets forth a word vector approach wherein the fingerprint - the word vector of the six most common words in a population - are combined with a document count and position vector and comparison is made to see if two documents are likely to be identical. The fingerprinting described in the present application is quite different. This word vector form of fingerprint would render following steps of claim 1, particularly steps (f) through (k) inoperable in that the entire document content must be fingerprinted in order to carry out such steps (Appeal Brief: pages 16-17).

**Examiner's Response:** The cited portion of Bluhm states "... It has been determined that the top n (where n is a relatively small integer) document idf terms (including tokens and their positions relative to each other) are sufficient to provide a "fingerprint" of a document for purposes of comparison ... This fingerprint must be prepared as a metadata field for each document that is to be used in a duplicate detection system.

The claim limitation merely states "fingerprinting said gathered documents." The Appellant admits that Bluhm teaches fingerprinting, however, the Appellant argues that

the fingerprinting of Bluhm is quite different from that of the present application. It is noted that the Appellant fails to explain how the fingerprinting of the present application differs from that of Bluhm. The Appellant merely points out how the overall intended use of the Bluhm invention differs from that of the present application.

In regards to the argument that "This word vector form of fingerprint would render following steps of claim 1, particularly steps (f) through (k) inoperable in that the entire document content must be fingerprinted in order to carry out such steps," it is noted that the steps (f) through (k) do not state that the results or any bi-product from fingerprinting the documents are further incorporated into the steps. Therefore, the examiner does not agree that the fingerprinting of Bluhm would render steps (f) through (k) inoperable.

**Appellants' Argument:** Step (g) of claim 1 describes the loading of text criteria into at least one of the nodes and the Examiner has rejected that step with respect to [0081] of Nevin. Nevin describes an organization algorithm and not this text criteria which is utilized with a node to evolve a search question whereupon a search may then be undertaken (Appeal Brief: page 17).

**Examiner's Response:** It is noted that the cited portion of Nevin should be [0018]. The cited portion states "... Data is stored into nodes and visualized as a 'sea' of linked nodes. Nodes can contain anything such as documents, movies, telephone numbers, applications or words containing concepts. Interactions with the user organize the data from a defined, and then refined point of view, with relevant data brought to their attention by smooth changes in the data's appearance (Nevin: [0018])."

In order to store data in a node, the data would first have to be entered or loaded into the node. Nevin stores concepts into the node. For the reasons mentioned previously, a concept is considered to represent a text criteria. Therefore, [0018] of Nevin is considered to teach the limitation.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., text criteria which is utilized with a node to evolve a search question whereupon a search may then be undertaken) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**Appellants' Argument:** Step (h) of claim 1 sets forth that for each document of the database, there is calculated geometric relative distance from a node to derive one or more node attractors. In rejecting the step, the Examiner has identified [0031] and [0185] of Nevin and has commented that the connection strength of the link from one node to another is considered to represent the "relative distance". Nevin describes that predetermined attribute data is stored into nodes and these nodes are linked by relationships of variable lengths. By contrast, step (h) provides that for each document of a database its geometric relative distance from one or more nodes is calculated. There are no documents in Nevin by which such calculation may be carried out, Nevin teaching only graphics defining a relationship between nodes, not between a document

and a node, it being reiterated that, by contrast, the graphics location of nodes in the present invention is merely a matter of convenience. In effect, the Examiner is basing a rejection on the applicants own teachings, reading into Nevin what simply doesn't exist in Nevin (Appeal Brief: page 17).

**Examiner's Response:** The cited portions of Nevin state "Data is stored into nodes which are linked together. All nodes contain variables, including descriptions, types, magnitudes and timestamps. Links also contain information about themselves, including connection strength of the link and descriptive information (Nevin: [0031])" and "... The internal parameters are changed by (typically recursive) commands that start at one node and spread through links to others. Commands adjust connection strength and magnitude of nodes based on their programmed algorithms and local node and link information, such as node type and distance from the point of view (Nevin: [0185])."

According to [0018] of Nevin, nodes can contain concepts or documents. Therefore, there are documents in Nevin and a calculation of distance from a document node to a concept node is considered to meet the requirement of the limitation.

**Appellants' Argument:** Step (i) of claim 1 sets forth a displaying of the net at the display in combination with one or more document symbols, each representing a document located in correspondence with the calculated relative distance. With respect to this step, the Examiner has identified [0033], [0084] and Fig 2 of Nevin. There are no document symbols and calculated relative distance described or suggested in Nevin, which only describes a positioning and relative relationship between nodes. [0084] and

Fig. 2 of Nevin represent an algorithm to determine what nodes belong together and once a net is developed by Nevin, that is the final result. That's it, he's finished. By contrast, in the instant application the net is merely a platform for organizing documents and, as noted, Nevin does not display document symbols or as much as consider such an arrangement (Appeal Brief: page 18).

**Examiner's Response:** In regards to Appellant's argument that there are no document symbols in Nevin, the Examiner disagrees. In Figure 8, Nevin displays square document symbols for the nodes Glazing\_Techniques, Acrylics, Frescoes, Secular\_Images, Food and Oils. According to [0018] of Nevin, nodes can represent documents.

Figure 8 (Nevin)

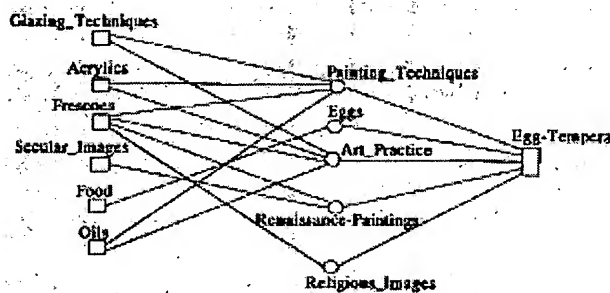


Fig. 8

In regards to Appellant's argument that there is not a calculated relative distance, the Examiner disagrees for the reasons stated above in regards to limitation h).

**Appellants' Argument:** Step (j) of claim 1 provides for visually examining the display of the net and document symbols and the Examiner has identified [0084], lines

14-17 of Nevin with respect to this step. Nevin is irrelevant with respect to step (j) inasmuch as there are no documents in Nevin and there is no display of document symbols (Appeal Brief: page 18).

**Examiner's Response:** The cited portion of Nevin states "Then, feedback is provided to the user by displaying representations of the nodes on a display device in accordance with the internal parameters set in the second step."

According to [0018] of Nevin, nodes can contain concepts or documents. Therefore, there are documents in Nevin and the nodes are represented by rectangles which are considered to represent the document symbols. Therefore, the display of Nevin is considered to meet the requirements of the claim limitation.

**Appellants' Argument:** Step (k) of claim 1 provides for determining from the document symbol locations at the display, those documents, if any, which are more likely to correspond with the text criteria. The Examiner has identified [0313] and [0315] of Nevin with respect to this step commenting that the user determines which categories are considered to be good or bad. The pertinent paragraphs of Nevin have no applicability, there being no determination with respect to document symbol locations at the display and from those symbol locations determining if any are more likely to correspond with text criteria. There can be no way to equate step (k) with the teachings of Nevin. As before, the applicants are being rejected on their own teaching (Appeal Brief: page 18).

**Examiner's Response:** The cited portions of Nevin state "Examples of operations performed on nodes of the inventive set of linked nodes (or on a sea of displayed representations of such nodes) includes:" (Nevin: see [0313]) and "... The user may find ANs which are obviously related or not related to their interest, and thereby significantly change the presented data set. Since these ANs haven't been used recently, we in effect triangulate the target data set from more vantage points. Determining categories which, when evaluated by the user as good or bad, have a large effect on narrowing the presented data set, that is helping the user find the target data set" (Nevin: [0315]).

For the reasons stated above, Nevin is considered to include documents and document symbols. Therefore, since the user is performing operations on the nodes and can evaluate whether the categories are good or bad, Nevin is considered to teach the concept of visually determining which documents are highly correlated with the text criteria.

○ ***Claim 2***

**Appellants' Argument:** Claim 2, dependent upon claim 1 should be considered allowable for reasons given in connection with claim 1 (Appeal Brief: page 18).

**Examiner's Response:** Since claim 2 is dependent on claim 1, the rejection of claim 2 is maintained for the reasons stated above in connection with claim 1.

○ ***Claim 3***



**Appellants' Argument:** Claim 3 sets forth that step (g) loads the text criteria into a positive designated one of nodes. The Examiner has indicated that the claim is described in [0031] and [0083], lines 4-14 of Nevin, commenting that data is stored in the nodes and that a node can have a positive position. The present invention has no concern with position. The technique of Nevin is not concerned with whether a node is positive or negative and, in particular, positively or negatively attracting certain textual content in the sense of the present invention (Appeal Brief: page 18).

**Examiner's Response:**

The cited portion of Nevin recites "Data is stored into nodes which are linked together ... The internal parameters include those listed (with 'pressure' denoting the values of summed forces influencing a node's position, 'forces' denoting parameters indicative of pushing or pulling of the node's position relative to other nodes: positive or negative values calculated by repetitive interactions between any node and others, and global forces such as 'drift' or 'gravity' biasing the positions of the nodes, and 'positions' denoting the location on the computer display, or more generally the doublet or triplet representing a node inside a virtual space, viewed on the computer's display" (Nevin: [0031] and [0084], lines 4-14).

Nevin teaches assigning a positive or negative value to a node. The claim language of the present invention fails to mention a particular method of designating a value to the node. Therefore, storing data in the positive node of Nevin is equated to loading text criteria into a positive designated node of the claim.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., negative nodes and positively or negatively attracting certain textual content) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

○ **Claim 4**

**Appellants' Argument:** Claim 4 describes that step f) forms the net as comprising a positive designated node and a null designated node connected by an interaction. The Examiner has cited Nevin at [0083], [0084], lines 4-14 and [0123]. A null node in accordance with the invention, is a node which has no content in it and therefore attracts no documents at all. This has no resemblance to the utilization of a null node as taught in the present invention (Appeal Brief: page 19).

**Examiner's Response:** Paragraph [0123] which states "...if null, then last node is used ..." was cited in regards to the null node. The example given in the Appellant's Specification on page 13 in regards to Fig 2 depicts the null node as having no attractor information. The claim limitation merely recites "a null designated node." In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a node which has no content in it and therefore attracts no documents at all) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from

the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the null node of Nevin is considered to meet the requirements of Appellant's claimed null node.

○ **Claim 5**

**Appellants' Argument:** Claim 5 describes that step (e) determines the text criteria as criteria document textual material and the Examiner has cited column 6, lines 33-47 of Bluhm with respect to this component of the claim. There is nothing in Bluhm that remotely suggests criteria document textual material which is used to evolve a search question as established in claim 1. Step (g1) normalizing said criteria document textual material is being identified by the Examiner with Bluhm at column 22, lines 40-44. There is no criteria document textual material as much as suggested in Bluhm, let alone its normalization. Step (g2) for fingerprinting the normalized criteria document textual material is said to be seen in Bluhm at column 26, line 8 through column 27, line 14. As stated above, the type of fingerprinting set forth in detail in Bluhm is of a word vector type which would render subsequent steps from step (g) in claim 1 as being inoperative (Appeal Brief: page 19).

**Examiner's Response:** Column 6, lines 33-47 of Gallivan teaches the limitation "(e) determines said text criteria as criteria document textual material" for the reasons stated above in regards to limitation (e) of claim 1.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., criteria document textual material which is used to evolve a search question) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that Bluhm fails to remotely suggest criteria document textual material which is used to evolve a search question, a **recitation of the intended use** of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. It is noted that in this instance, the claim language lacks a recitation of this intended use as stated above.

Limitation (g1) is taught by Gallivan in column 6, lines 5-7, which states "The individual documents 45 are preprocessed and noun phrases are extracted as concepts (transition 61) into lexicon 46. The noun phrases are normalized ..." The concepts are considered to represent text criteria for the reasons discussed above in regards to limitation (e) of claim 1. Therefore, since Gallivan discloses normalizing concepts, Gallivan is considered to teach the limitation of normalizing text criteria.

In regards to the argument that Bluhm fails to teach the fingerprinting of limitation (g2), the Examiner disagrees for the reasons stated above in relation with limitation (d) of claim 1.

○ **Claim 6**

**Appellants' Argument:** Claim 6 was indicated as being allowable subject being written in independent form. That step determines positive text criteria and negative text criteria with respect to a document population. Nevin is not concerned with criteria employed initially to evolve a search question. Step (f) of claim 6 provides for the formation of a net comprising one or more positive designated nodes, one or more negative designated nodes and one or more interactions. Nevin does not use interactions between positive and negative nodes but uses relationships generally identified by node position and as noted above, the position of the nodes in the present invention is arbitrary. Step (g) of claim 6 provides for loading of positive text criteria into positive designated nodes and negative text criteria into negative designated nodes. While data might be stored in nodes, it is stored for a different purpose than Page 19 of 38 the present invention, the present invention storing text criteria to develop a question for a search. Step (h) of claim 6 provides for the calculation for each document of the database, its geometric relative distance from both positive designated nodes and negative designated nodes. The step at hand is one wherein this distance is calculated with respect to documents and nodes and not between nodes as described in Nevin. Nevin is not concerned with developing a question for carrying out a search nor a document organization technique, but a technique for graphically representing entity-relationship diagrams (Appeal Brief: pages 19-20).

**Examiner's Response:** Since claim 6 was objected to as being allowable if written in independent form, the arguments are moot.

○ **Claim 7**

**Appellants' Argument:** Claim 7, dependent upon claim 1, should be considered allowable for reasons given in connection with claim 1 and additionally because there are no document symbols in any of the references (Appeal Brief: page 20).

**Examiner's Response:** Since claim 7 is dependent on claim 1, the rejection of claim 7 is maintained for the reasons stated above in connection with claim 1.

In regards to Appellant's argument that there are no document symbols in Nevin, the Examiner disagrees. In Figure 8, Nevin displays square document symbols for the nodes Glazing\_Techniques, Acrylics, Frescoes, Secular\_Images, Food and Oils. According to [0018] of Nevin, nodes can represent documents.

Figure 8 (Nevin)

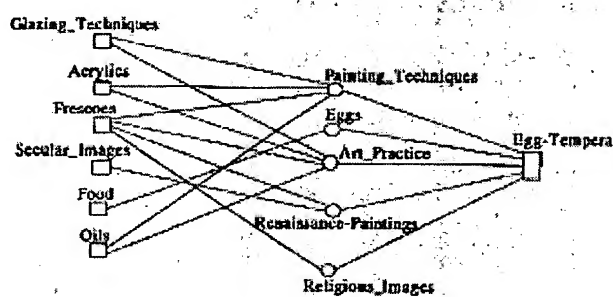


Fig. 8

○ **Claim 8**

**Appellants' Argument:** Step (l) of claim 8 provides for retrieving the identification of those documents resulting from step (k), and further, step (n) of that

claim provides for reviewing one or more of the documents identified in step (l) and determining the quality of the match thereof with step (e) text criteria, the Examiner citing [0313] and [0315] of Nevin with respect to this step. The paragraphs of Nevin which have been cited have no relationship to documents, are not describing the same operation or even a similar operation and are not evaluating the quality of the match of documents with text criteria (Appeal Brief: page 20).

**Examiner's Response:** According to [0018] of Nevin, nodes can contain documents. Therefore, the discussion of nodes in the cited paragraphs of Nevin do have a relationship to documents. Furthermore, the Appellant fails to point out why the cited portions of Nevin are not describing the same operation and are not evaluating the quality of the match of the documents with text criteria. Therefore, "Determining categories which, when evaluated by the user as good or bad, have a large effect on narrowing the presented data set, that is helping the user find the target data set" (Nevin: [0315]) is considered to represent determining a quality of match since the user is determining good and bad categories.

o **Claim 9**

**Appellants' Argument:** Step (n) of claim 9 provides for the identification of new text criteria as a result of step (m) determination of insufficient quality of match, step (o) of claim 9 provides for the adding of the identified new text criteria to the step (g) text criteria loaded in the positive node, and step (p) of claim 9 reiterates steps (h) through (m) and the Examiner has cited [0313] and [0315] of Nevin with respect to these steps. Nevin identifies the properties of nodes precisely and in advance whereas by contrast

new text criteria with the present invention is determined to improve a search question and the developed new test criteria is loaded into the positive node, whereupon there is a reiteration of steps (h) through (m) and Nevin is not concerned with documents and steps constituting a searching of their contents or any other kind of interactive process (Appeal Brief: page 20).

**Examiner's Response:** In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., new test criteria is determined to improve a search question) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

○ **Claim 10**

**Appellants' Argument:** Step (q) of claim 10 describes that subsequent to step (m) identifying and viewing at said display a list of features common to those documents, the identification of which was retrieved in step (l); a step (r) identifying a new text criteria in correspondence with step (q) and viewing features common to those documents, the identification of which was retrieved in step (l); a step (s) of adding the identified new text criteria to the step (q) text criteria loaded into the positive node, and step (t) reiterating steps (h) through (m), and the examiner has cited [0313] – [0316] of Nevin with respect to this claim. Claim 10 looks to the extraction of common features and an iterative process which functions to improve the development of a question for



carrying out a search by improving a question or rule and Nevin has nothing to do with such document evaluation but does deal with similarities or relationships between nodes and not documents and interactions associated with nodes, and further there are no search related steps in Nevin and no criteria addition to improve the capabilities for carrying out a search and, lastly Nevin doesn't carry out steps (q) through (s) and certainly does not reiterate them as set forth at step (t) (Appeal Brief: pages 20-21).

**Examiner's Response:** In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the development of a question for carrying out search by improving a question or rule) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, Nevin is considered to discuss the relationship of a node and documents for the reasons discussed above in regards to the previous claims.

o **Claim 11**

**Appellants' Argument:** Step (k1) of claim 11 provides for determining additional text criteria where the document symbol locations are not likely to correspond with such text criteria, and step (k2) provides for adding additional text criteria to the text criteria determined at step (e). The Examiner has cited [0313] – [0316] of Nevin with respect to this claim. Nevin is not addressing the subject matter of documents nor the

development of a question for search activity associated with documents nor does Nevin address the subject matter of adding additional text criteria to improve a question used for search (Appeal Brief: page 21).

**Examiner's Response:** In response to Appellant's arguments that Nevin is not addressing the subject matter of documents, the examiner disagrees. In [0018], Nevin states "Nodes can contain anything such as documents, movies, telephone numbers, applications or words containing concepts. Therefore, since nodes can contain documents, Nevin is addressing the subject matter of documents.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **the development of a question for search activity associated with documents; and adding additional text criteria to improve a question used for a search**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

○ **Claim 12**

**Appellants' Argument:** Claim 12 provides that step (I) is carried out by drawing at the display of a net a boundary defining region of the document symbols and the Examiner has cited [0320] of Nevin with an indication that the boundary region is determined by the available screen space. Nevin at [0320] is describing the accommodation of a need for arithmetically changing the shape of a net within the

space confines of the display. By contrast, claim 12 selects a grouping of documents by drawing boundaries on the display around document symbols. There are no document symbols in Nevin nor a technique for selecting them (Appeal Brief: page 21).

**Examiner's Response:** The cited portion of Nevin states "preliminary to displaying representations of the nodes on a screen in a screen space having N dimensions, where N is an integer, dividing a display space having N+1 into an array of cells, wherein the dimension of the display space includes a size dimension" (Nevin: [0320]). The screen is considered to represent the boundary region. Since the screen allows the user to zoom into certain areas of the screen, and therefore define a region of document symbols, Nevin is considered to meet the requirements of the limitation.

- **Argument II: Claims 13-21 are not patentable nor obvious over Bluhm in view of Nevin.**

- **Claim 13**

**Appellants' Argument:** Step (f) of claim 13 provides for selecting a document attribute to be correlated and the criteria for establishing an attribute value match. The Examiner has cited column 6, lines 33-47 of Bluhm with respect to this step. Step (f) of claim 13 is associated with two delimited regions at the display that is further associated with step (g) determining value matched pairs, and column 6, lines 33-47 of Bluhm have nothing to do with the procedures of claim 13, Bluhm being concerned with database management and the partitioning of documents into one or more collections as opposed

to the instant method wherein text search attributes are employed which are not database predetermined collections (Appeal Brief: pages 21-22).

**Examiner's Response:** In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., text search attributes are employed which are not database predetermined collections) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**Appellant's Argument:** Step (g) of claim 13 provides for determining the presence of one or more document attribute value match pairs between first and second regions and the Examiner has cited the same column 6, lines 33-47 of Bluhm. As set forth at [0048] of the above declaration, there are no document symbols in Bluhm and there are no regions in Bluhm and there are no document attribute value match pairs in Bluhm (Appeal Brief: page 22).

**Examiner's Response:** This limitation fails to require document symbols. For the reasons mentioned above, Nevin discloses the concept of document symbols.

**Appellant's Argument:** Step (b) of claim 13 provides for forming one or more nets, each comprising at least two nodes associated by at least one interaction, one or more of the nodes representing an evaluation criteria and one or more being viewable

at the display, and the Examiner has cited Fig. 1 and [0081] of Nevin. Nevin stores all of the data in nodes whereas document criteria are stored in the nodes of the instant invention and further with respect to the entirety of claim 13, there is nothing in Nevin describing how two nets would interact with each other, that is two nets are used together to do a searching feature that neither net could do alone. The searching feature in this case is the development of question which may be used to carry out a search (Appeal Brief: page 22).

**Examiner's Response:** The corrected citation of Nevin is [0018]. As stated previously, [0018] states that concepts can be stored in nodes and that the concepts are considered to represent an evaluation criteria or a text criteria. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., how two nets would interact with each other, that is two nets are used together to do a searching feature that neither net could do alone; the searching feature in this case is the development of question which may be used to carry out a search) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is also noted that claim limitation b) only requires one net.

**Appellant's Argument:** Step (c) of claim 13 provides for treating the documents to have an attribute value and calculating for each document a geometric relative

distance with respect to node criteria and displaying corresponding document symbols. The Examiner has cited [0031] and [0185] of Nevin, with respect to this step stating that the connection strength of the link from one node to another is considered to represent relative distance. The Examiner's analysis of step (c) of claim 13 is incorrect for reasons stated above in the declaration and particularly because Nevin has nothing to do with document symbols nor calculation of relative distance of document symbols with respect to node criteria. There are no document symbols in Nevin (Appeal Brief: page 22).

**Examiner's Response:** Nevin is considered to teach this limitation for the reasons stated above in regards to limitations h) and i) of claim 1.

**Appellant's Argument:** Step (d) of claim 13 provides for delimiting at the display a first region of the document symbols, and the Examiner cites [0031] and Fig. 1 of Nevin with respect to this step, stating that linking the nodes together is considered to represent delimiting and the connection of node 1 to node 2 is considered to represent a first region. With respect to step (d) of claim 13 there is no concept of region at all in Nevin and the Examiner's observation that connecting two nodes together constitutes a region is simply incorrect. The Examiner's indication that linking nodes together represents delimiting is incorrect and there are no document symbols in Nevin to establish a delimited region. Step (e) of claim 13 provides for delimiting at the display a second region of document symbols and the Examiner has applied the same rejection as provided with respect to step (d). The applicants submit that there are no document

symbols in Nevin, there are not two regions in Nevin which are delimited, and the linking of node 2 to node 3 does not constitute a region of document symbols (Appeal Brief: pages 22-23).

**Examiner's Response:** Reasons of why Nevin is considered to include document symbols and interaction between nodes and documents are stated above in regards to claim 1. The Appellant fails to explain why the Examiner's observation is incorrect and therefore the Examiner maintains that Nevin teaches the limitation.

**Appellant's Argument:** Step (h) of claim 13 displays correlations as are developed in connection with step (g) as they exist between first and second regions. The Examiner has cited [0033] of Nevin, stating that the display of nodes based on a location calculated from force parameters is considered to represent displaying correlations. The Examiner's statement is simply and totally incorrect. Nevin is concerned with entirely different subject matter where for correlation two or more nodes are bound in space is unrelated to the invention where correlation is concerned with showing how two nets work together to show how a set of documents are closely grouped within two or more organized systems (nets) (Appeal Brief: page 23).

**Examiner's Response:** In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., two nets that work together to show how a set of documents are closely grouped within two or more organized systems) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claim language only requires one net. Therefore, it is unclear how the claim could be directed towards the interaction of two or more nets.

○ **Claim 14**

**Appellants' Argument:** Claim 14 provides that step (d) provides a first region extending over more than one net and includes a step (dl) of mapping the first region to a first document set by selecting the union or intersection of documents on different nets. The Examiner has cited [0031] and Fig. 1 of Nevin without comment. There are no document symbols in Nevin, there is no development of a search question in Nevin, there is no first region in Nevin, there is no first region extending over more than one net in Nevin, there is no suggestion of mapping of the first region to a first document set by selecting the union or intersection of documents on different nets in Nevin (Appeal Brief: page 23).

**Examiner's Response:** Nevin discloses document symbols and regions for the reasons stated previously. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., development of a search question) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).



○ **Claim 15**

**Appellants' Argument:** Claim 15 is similar to claim 14 but provides the second region extending over more than one net and includes the step of mapping the second region to a second document set by selecting the union or intersection of documents on different nets. The Examiner has cited the same components of Nevin with respect to claim 14, and the same response provided with respect to claim 14 also applies to the rejection of claim 15 in that no regions over nets and no mapping by selecting the union or intersection of documents on different nets is so much as suggested in Nevin (Appeal Brief: page 23).

**Examiner's Response:** Nevin is considered to teach the limitation for the reasons stated above in regards to claim 14.

○ **Claim 16**

**Appellants' Argument:** Claim 16 provides that step (f) selects said criteria for establishing attribute value match by defining an attribute value tolerance, and the Examiner has cited column 6, lines 33-47 of Bluhm without comment. As stated above, column 6, lines 33-47 of Bluhm has no relevance to establishing an attribute value by defining an attribute value tolerance and there is no suggestion whatsoever in Bluhm of employing tolerance for any purpose (Appeal Brief: pages 23-24).

**Examiner's Response:** Bluhm is considered to disclose the limitation for the reasons stated above in regards to claim 13.

○ **Claim 17**

**Appellants' Argument:** Claim 17, dependent upon claim 16 provides that step (g) determines the presence of a document attribute match pair by determining whether the attribute value of a document in said first region is equal to the attribute value of a document in said second region within said attribute value tolerance. The Examiner has again referred to column 6, lines 33-47 of Bluhm with respect to this claim. There are no first and second regions suggested in Bluhm, as is quite apparent there is no determination of the presence of a document attribute match pair between regions within an attribute value tolerance suggested in Bluhm as additionally discussed above in connection with claim 16 (Appeal Brief: page 24).

**Examiner's Response:** Bluhm is considered to disclose the limitation for the reasons stated above in regards to claim 13.

○ **Claim 18**

**Appellants' Argument:** Claim 18 recites that step (d) is carried out by providing a computer generated line or lines visible at the display, and the Examiner has cited [0083] of Nevin with respect to this claim. Claim 18 with respect to step (d) draws computer generated lines delimiting a first region of document symbols at the display. There are no document symbols nor are there regions suggested in Nevin, Nevin only describes the positioning of lines between nodes which basically are representations of

some predetermined relationship between two nodes, an arrangement that has no relevance whatsoever to claim 18 (Appeal Brief: page 24).

**Examiner's Response:** Nevin discloses document symbols and regions for the reasons stated above in regards to claim 13. Therefore, the lines between the nodes of Nevin are considered to meet the requirements of the current limitation.

○ **Claim 19**

**Appellants' Argument:** Claim 19 provides that step (e) delimits a second region of document symbols by providing a computer generated line or lines visible at the display, and the Examiner has cited [0083] of Nevin. Nevin provides a line which basically is a representation of some predetermined relationship between two nodes which has no suggestion of delimiting a second region of document symbols as well as no suggestion of document symbols at all, and no suggestion of delimiting by computer generated lines about these document symbols (Appeal Brief: page 24).

**Examiner's Response:** Nevin discloses document symbols and regions for the reasons stated above in regards to claim 13. Therefore, the lines between the nodes of Nevin are considered to meet the requirements of the current limitation.

○ **Claim 20**

**Appellants' Argument:** Claim 20 provides that step (h) is carried out by providing a visible line at the display connecting two document symbols and representing the correlation developed in connection with step (g) of claim 13. The

Examiner has cited [0083] of Nevin with respect to this claim. The commentary given above in connection with claims 18 and 19 applies, but now with respect to providing a visible line between two document symbols representing a correlation, the present invention having document symbols and nodes, Nevin having only nodes (Appeal Brief: pages 24-25).

**Examiner's Response:** The Examiner disagrees for the reasons stated above concerning the concept that Nevin does contain document symbols and nodes.

○ **Claim 21**

**Appellants' Argument:** Claim 21 provides that step (f) selects said document attribute to be correlated and the criteria for establishing an attribute value match through selecting the document attribute or document identification and step (g) identifies the same document in each of the first and second regions as a correlation. The Examiner has cited [0093], lines 4-7 and 0094 of Nevin in rejecting this claim. Claim 21 looks to see where a particular document symbol appears in two different kinds of organizations, and Nevin concerns no document symbols, no regions and provides no discussion of correlation but only the relationship between nodes, not document symbols (Appeal Brief: page 25).

**Examiner's Response:** The Examiner disagrees for the reasons stated above concerning the concept that Nevin does contain document symbols, nodes and regions.

- **Argument III: Claims 22-24 are not patentable or not obvious over Crooks in view of Nevin.**

- **Claim 22**

**Appellants' Argument:** Crooks, et al., is an approach wherein there is parsing of a health care order based on the parsing identification and interpretation of specific keywords, terms and abbreviations, wherein essentially a string-based order is parsed and "normalized", e.g., matched and replaced input with actual terms, to determine specific components such as drug dosage whereupon a distance is assigned using the well-known technique which identifies how many character changes had to be made to achieve a match with the rule-based database. Crooks, et al., is not fingerprinting nor comparing fingerprints or employing interactivity or a graphical component (Appeal Brief: page 25).

**Examiner's Response:** With respect to step (b) of claim 22 identifying the population of documents to be searched, there is no search of documents in Crooks, et al., but there is a search of a database of rules and only for the purpose of interpreting a medical order, no attempt being made to search for a document, or place the document in any type taxonomy (Appeal Brief: page 25).

The cited portion of Crooks states "... the system receives an input string from the user and returns to the user the best possible matches for user selection ..."  
(Crooks: [0022]). The database is being searched and in order to retrieve any type of results when searching a database, some type of records first have to be identified.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., place the document in a taxonomy) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**Appellant's Argument:** Step (c5) provides for setting an offset and factor for numeric class, for instance, determining whether a number is within a particular range, the step representing an aspect of achieving a representation of text which is searchable as opposed to Crooks, et al., an approach which seeks an accurate grammatical representation. Step (c8) provides that for each accessed, W, which is a number, converting such a number into a sequence of word numbers, WN, and normalizing these word numbers for fingerprinting, the Examiner citing [0024], lines 1-28 of Crooks, et al. Crooks, et al., has nothing comparable to normalizing word numbers as, WN. Step (c9) of claim 22 provides for marking the position and link of each, W, or normalized word number, WN, and the Examiner has cited [0026], lines 31 et seq., of Crooks, et al. Crooks, et al., at the above cited paragraph and lines is concerned with an attempt to find an approximate match with the rule database, when an exact one cannot be found, the number of letters required to be changed to match a rule term in the database representing a distance, and such an approach has no relationship to the recitation of step (c9). Step (c10) of claim 22 provides that for each, W, or normalized,

WN, completing the normalization by reiterating steps (c8) and (c9), and the Examiner has cited paragraph 0026, lines 10-12 of Crooks, et al., with the commentary that refining is considered to represent repeating. With respect to the Examiner's commentary concerning step (c10) and the term "refining", the present invention is doing an iterative process to achieve optimal normalization while Crooks, et al., strives to obtain word matches and then refine by eliminating the junk, and there is no relationship between these methods nor their purpose (Appeal Brief: pages 25-26).

**Examiner's Response:** The cited portions of Crooks normalizes documents containing both numbers and characters. Therefore, Crooks is considered to represent the steps of limitation c).

**Examiner's Response:** Step (d) of claim 22 provides for fingerprinting the normalized documents. The Examiner has cited [0024]-[0026] of Crooks, et al., with respect to this step. There is no fingerprinting whatsoever taught by Crooks, et al (Appeal Brief: page 26).

**Examiner's Response:** The conversion of the strings is considered to represent the step of fingerprinting.

**Appellant's Argument:** Step (e) of claim 22 provides for forming one or more nets each comprising at least two nodes, one or more said nodes representing an evaluation criteria, said one or more nets exhibiting two or more spaced apart nodes connected by one or more interactions. The Examiner has cited Fig. 1 of Nevin with

respect to this step. The applicants reiterate the commentary made in connection with claim 1 at step (f). Step (f) of claim 22 provides that for each normalized document, calculating its geometric distance from a said node. With respect to this step the Examiner repeats the rejection made in connection with step (h) of claim 1. The applicants reassert their response concerning step (h) of claim 1. Step (g) of claim 22 provides for displaying one or more nets at the display in combination with one or more document symbols representing a said document located in correspondence with said calculated relative distance. The Examiner has cited the same component of Nevin as cited with respect to step (i) of claim 1. The applicants reassert their response to that rejection in response to this rejection. The final step of claim 22 provides for determining from said document symbol locations at said display, if any, those documents which are more likely to correspond with said evaluation criteria. With respect to this paragraph, the Examiner repeats the rejection asserted in connection with step (k) of claim 1. As set forth at [0081] of the above declaration, the applicants repeat the argument set forth at claim 1 (Appeal Brief: pages 26-27).

**Examiner's Response:** Nevin is considered to teach limitations e) – g) for the reasons stated in regards to claim 1.

○ **Claim 23**

**Appellants' Argument:** Claim 23 has been indicated as being allowable subject to being written in independent form. Claim 23 provides for steps (c8.1) through (c8.8) describing in detail step (c8) of claim 22. Crooks, et al., neither carries out nor suggests



any of these steps. More specifically with respect to claim 23, step (c8.1), Crooks, et al., merely determines the presence of a date and uses it directly while the present step is developing a record that can be used for searching, Crooks, et al., carrying out no conversion to a float or integer. With respect to step (c8.2), applying an offset and factor to improve fingerprinting, Crooks, et al., does not carry out fingerprinting whatsoever. With respect to steps (c8.3)-(c8.8), there is no similarity or purpose in any way related to the teachings of Crooks, et al.

**Examiner's Response:** Since claim 23 was objected to as being allowable if written in independent form, the arguments are moot (Appeal Brief: page 27).

○ **Claim 24**

**Appellants' Argument:** Claim 24 has been considered allowable subject to being rewritten in independent form. The claim describes that step (c8.3) further comprises the step (c8.3.1) setting the precision of, P, the normalized word number, WN, and step (c8.8) is carried out until the number of said successive positions, S, deriving said second component equal the value of said precision, R. Crooks, et al., is not utilizing precision, presumably for good reason, that one would not wish to use that approach in dealing with medical applications and both components of this claim utilize a precision function.

**Examiner's Response:** Since claim 24 was objected to as being allowable if written in independent form, the arguments are moot (Appeal Brief: page 27).

**(11) Related Proceeding(s) Appendix**


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
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